

REMARKS

The Office Action dated April 18, 2006 has been carefully considered. Claims 1-3 have been canceled. New claim 4 has been added. Claim 4 is in this application.

The previously presented claims were rejected under 35 U.S.C. § 112 as indefinite. Applicant has rewritten claims 1-3 as claim 4 to meet the guidelines set forth in 35 U.S.C. § 112.

The present invention relates to a method for improving fluffiness of cooked rice in the package. The cooked rice is provided as a processed food which can be eaten only by warming. Accordingly, a process for preparing the cooked rice comprises a cooking step. It has been found that the cell membrane of starch is destructed during typical high temperature sterilization and starch pasted during the cooking process results in glutinousness of cooked rice in which grains of the cooked rice stick to each other. Thus, the fluffiness of the conventional cooked rice is fallen. If the grains stick to each other, the cooked rice in a package is not suitable to use as food since the mouth feel is not soft. The present invention provides a sterilization step of short duration, 4 to 8 seconds, in order to preserve the cooked rice for long term of six months more in normal temperature and provides fluffy rice.

The previously presented claims were rejected under 35 U.S.C. § 103 as obvious in view of U.S. Patent No. 6,139,898 to Meyer et al.

Meyer et al. teach a process of manufacturing a shelf stable rice product comprising the steps of soaking rice in water, portioning the rice into predetermined amounts, blanching the rice with water as liquid for cooking, cooling, contacting the rice with acidified water to impart a pH of 3.5 to 4.5, treating the rice with an oil to coat the surface of the rice to form a rice product, packaging the rice product in a package, and pasteurizing at 80 to 100° C for 1 to 80 minutes.

In contrast to the invention defined by the present claim, Meyer et al. do not teach or suggest the step of removing water before sterilization. Rather, Meyer et al. teach the step of blanching the rice as defined for cooking the rice directly after soaking with water. Applicants have found that the step of removing water before sterilization improves fluffiness of the cooked rice by preventing destruction of the starch membrane and pasting of starch. In Meyer et al., the starch of the rice is degenerated to give oxidized starch during the blanching step because of organic acid in the acidified water and the fluffiness of the rice is compromised.

Further, in contrast to the invention defined by the present claims, Meyer et al. do not teach or suggest sterilization for four to 10 times at 130° C to 150° C for four to eight seconds each time. Rather, Meyer et al. teach low temperature pasteurization of 80° C to about 100° C. Applicants submit that the low temperature of Meyer et al. prevents the microorganisms on the surface of the rice to be completely extinct. In the present invention, microorganisms are removed on the surface of the rice simultaneously with prevention of destruction of the starch cell membranes of the long grain by a series of sterilization for a short period under high temperature.

Further still, in contrast to the invention defined by the present claims, Meyer et al. do not teach or suggest the step of cooking the rice after adding the emulsified oil solution as liquid for cooking. Applicants submit that the use of an emulsified oil solution as liquid for cooking rice provides improved fluffiness of the rice. Accordingly, the present invention provides a coated rice which has a good sensory qualities and can be preserved for long term. There is no teaching or suggestion of these features in Meyer et al.

The previously presented claims were rejected under 35 U.S.C. § 103 as obvious in view of U.S. Patent No. 3,892,058 to Komatsu et al.

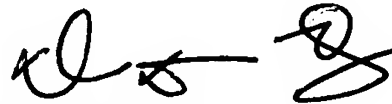
Komatsu et al. disclose a process for preparing high-temperature short-time sterilized packaged articles comprising the step of heating the sealed package at 130° C to 160° C for 0.5 to 15 minutes especially 1 to 8 minutes for sterilizing the filled food.

In contrast to the invention defined by the present claim, Komatsu et al. do not teach or suggest the step of removing water before sterilization. Further, Komatsu et al. do not teach or suggest sterilization for four to 10 times at 130° C to 150° C for four to eight seconds each time. Rather, Komatsu et al. teach a single sterilization step of sealed package for a much longer duration. Applications submit that the sterilization at a longer duration is disadvantageous for cooked rice as it will produce destruction of the starch cell membrane. Further, Komatsu et al. do not teach or suggest the step of cooking the rice after adding an emulsified oil solution as liquid for cooking.

Accordingly, Komatsu et al. do not cure the deficiencies of Meyer et al. and the invention defined by the present claims is not obvious in view of Meyer et al. alone or in combination with Komatsu et al.

In view of the foregoing, Applicants submit that all pending claims are in condition for allowance and request that all claims be allowed. The Examiner is invited to contact the undersigned should she believe that this would expedite prosecution of this application. It is believed that no fee is required. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 13-2165.

Respectfully submitted,



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